



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

APR 24 2006

REPLY TO THE ATTENTION OF:

WQ-16J

Mr. Robert Mosher Water Quality Standards Division of Water Pollution Control Illinois Environmental Protection Agency PO Box 19276 Springfield, IL 62794-9276

Dear Mr. Mosher:

Thank you for your January 24, 2006, letter to the United States Environmental Protection Agency (USEPA) regarding a proposed site-specific rule making to revise the total dissolved solids (TDS) standard for portions of the Lower Des Plaines River affected by the ExxonMobil Oil Refinery at Joliet, Illinois. In your letter, you requested that USEPA evaluate the information contained in the letter and provide a preliminary evaluation of whether or not the proposed site-specific rule making described in the letter would be consistent with the Clean Water Act (CWA) and Federal regulations if it were to be adopted by the Illinois Pollution Control Board (IPCB) and submitted to USEPA for review and approval.

For USEPA to further understand the proposed site-specific rule, a Petition for a Site-specific Rule water quality change was sent to Linda Holst from Tom Andryk, Assistant Counsel for Illinois Environmental Protection Agency (Illinois EPA) dated March 16, 2006. This was followed by a phone conversation on March 29, 2006, between Illinois EPA and USEPA and an email sent the same day explaining the recalculation procedure used to arrive at the proposed site-specific TDS standard (enclosed).

Summary of the proposed site-specific rule making

Under the conditions of a consent decree between USEPA and ExxonMobil, ExxonMobil is required to reduce its air emissions. To comply with the consent decree, Exxon Mobil intends to install wet gas scrubbers. As a result of the new air pollution controls, the concentrations of sodium sulfate in the wastewater discharge from the refinery will increase. ExxonMobil is seeking a site-specific standard change of the TDS standard for the Lower Des Plaines River from 1500 mg/L upstream of the I-55 bridge and 1000 mg/L downstream of the I-55 bridge to 1686 mg/L from the point of discharge to the confluence with the Kankakee River during the months of November to April. According to the letter, the applicable secondary contact and general use water quality standard cannot be met under winter low flow conditions because of high upstream TDS loads resulting from road salting. The letter indicates that even without the additional TDS loading from ExxonMobil due to the wet gas scrubber effluent, the highest observed ambient TDS concentration in the segment is 1595 mg/L; greater than either of the

applicable water quality standards. With the additional loading, the ambient concentrations under similar conditions are expected to be 1686 mg/L.

Based on all the documents, email and conversations that were provided to the USEPA, we understand that Illinois EPA is proposing a site-specific rule change based on a recalculation of the TDS standard based on new data and analyses conducted as part of Illinois' sulfate standard development effort. These data are used to demonstrate that the proposed site-specific standard for TDS is protective of uses given what is known about the toxicity of sulfates and the relationship between sulfate and chloride concentrations and TDS.

USEPA's preliminary review

USEPA understands that Illinois EPA will be submitting a proposed site-specific standard, based on the recalculation procedure, rule making to revise the TDS criterion for portions of the Lower Des Plaines River affected by the ExxonMobil Oil Refinery at Joliet, Illinois. Consistent with Section 303 of the CWA, USEPA will review Illinois' site-specific standard and either approve or disapprove at that time. However, USEPA has reviewed the information provided by Illinois EPA describing the technical basis for the proposed site-specific standard and determined that a site-specific standard derived consistent with the calculations provided in the email (enclosed) would be consistent with the requirements of Section 303(c) of the CWA and Federal regulations at 40 CFR 131.11 if it were to be adopted by the IPCB and submitted to USEPA consistent with Federal regulations at 40 CFR 131.6. This review is confined to the technical validity of the proposed standard only and does not constitute formal USEPA review and approval of new or revised water quality standards as required by Section 303(c)(3) of the CWA and Federal regulations at 40 CFR 131.21.

If you have any questions please feel free to contact Mari Nord at 312-886-3017 or Dave Pfeifer at 312-353-9024.

Very truly yours,

Linda Holst, Chief

Water Quality Branch

Enclosure